

WHAT IS CLAIMED IS:

1. An apparatus for recording speech, to be used as learning data in speech recognition processing, comprising:

storage means for storing a recording character string indicating a sentence to be recorded;

recognition means for recognizing input speech used as the learning data so as to obtain a recognized character string;

determination means for comparing a pattern of the recognized character string with a pattern of the recording character string stored in said storage means so as to obtain a matching rate therebetween, and for determining whether said matching rate exceeds a predetermined level; and

recording means for recording the input speech as the learning data when it is determined by said determination means that said matching rate exceeds the predetermined level.

2. An apparatus according to claim 1, further comprising re-input instruction means for issuing an instruction to input speech once again when it is determined by said determination means that said matching rate does not exceed the predetermined level.

3. An apparatus according to claim 1, wherein said determination means determines said matching rate by performing DP matching between the recognized character string pattern and the recording character string pattern.

4. An apparatus according to claim 3, further comprising presentation means for presenting an unmatched portion between the recognized character string pattern and the recording character string pattern to a user as a result of performing the DP matching by said determination means.

5. An apparatus according to claim 4, wherein said presentation means presents the unmatched portion so as to identify the type of error as an insertion error, a missing error, or a substitute error, as a result of performing the DP matching by said determination means.

6. An apparatus according to claim 4, wherein said presentation means simultaneously displays the recognized character string and the recording character string on a screen by changing a character attribute or a background attribute of an unmatched portion or a matched portion of at least one of the recognized character string and the recording character string.

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7. An apparatus according to claim 4, wherein said presentation means simultaneously displays the recognized character string and the recording character string on a screen by causing an unmatched portion or a matched portion of at least one of the recognized character string and the recording character string to blink.

8. A method for recording speech, to be used as learning data in speech recognition processing, comprising:

a recognition step of recognizing input speech used as the learning data so as to obtain a recognized character string;

a determination step of comparing a pattern of the recognized character string with a pattern of a recording character string so as to obtain a matching rate therebetween, and of determining whether said matching rate exceeds a predetermined level; and

a recording step of recording the input speech as the learning data when it is determined in said determination step that said matching rate exceeds the predetermined level.

9. A method according to claim 8, further comprising a re-input instruction step of issuing an instruction to input speech once again when it is determined in said

determination step that said matching rate does not exceed the predetermined level.

10. A method according to claim 8, wherein said determination step determines said matching rate by performing DP matching between the recognized character string pattern and the recording character string pattern.

11. A method according to claim 10, further comprising a presentation step of presenting an unmatched portion between the recognized character string and the recording character string to a user as a result of performing the DP matching in said determination step.

12. A method according to claim 11, wherein said presentation step presents the unmatched portion so as to identify the type of error as an insertion error, a missing error, or a substitute error, as a result of performing the DP matching in said determination step.

13. A method according to claim 11, wherein said presentation step simultaneously displays the recognized character string and the recording character string on a screen by changing a character attribute or a background attribute of an unmatched portion or a matched portion of at

14. A method according to claim 11, wherein said presentation step simultaneously displays the recognized character string and the recording character string on a screen by causing an unmatched portion or a matched portion of at least one of the recognized character string and the recording character string to blink.

15. A speech recognition system comprising:

storage means for storing a recording character string pattern indicating a sentence to be recorded;

recognition means for recognizing input speech;

determination means for comparing a pattern of the recognized character string obtained by recognizing the input speech, which is to be used as learning data, by said recognition means with a pattern of the recording character string stored in said storage means so as to obtain a matching rate therebetween, and for determining whether said matching rate exceeds a predetermined level;

recording means for recording the input speech as the learning data when it is determined by said determination means that said matching rate exceeds the predetermined level; and

learning means for performing learning on a speech model by using the input speech recorded by said recording means,

wherein said recognition means performs speech recognition by using the speech data learned by said learning means.

16. A speech recognition method comprising:

a learning recognition step of recognizing input speech, to be used as learning data, so as to obtain a recognized character string;

a determination step of comparing a pattern of the recognized character string with a pattern of a recording character string indicating a sentence to be recorded so as to obtain a matching rate therebetween, and of determining whether said matching rate exceeds a predetermined level;

a recording step of recording the input speech as the learning data when it is determined in said determination step that said matching rate exceeds the predetermined level;

a learning step of performing learning on a speech model by using the input speech recorded in said recording step; and

a recognition step of recognizing unknown input speech by using the speech model learned in said learning step.

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17. A control program having computer readable program code units for allowing a computer to execute a speech recording method, said speech recording method comprising:

a first program code unit for recognizing input speech used as the learning data so as to obtain a recognized character string pattern;

a second program code unit for comparing a pattern of the recognized character string with a pattern of a recording character string so as to obtain a matching rate therebetween, and of determining whether said matching rate exceeds a predetermined level; and

a third program code unit for recording the input speech as the learning data when it is determined in said determination step that said matching rate exceeds the predetermined level.

18. A control program for allowing a computer to execute a speech recognition method, said speech recognition method control program having computer readable program code units comprising:

a first program code unit for recognizing input speech, to be used as learning data, so as to obtain a recognized character string;

a second program code unit for comparing a pattern of

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the recognized character string with a pattern of a recording character string indicating a sentence to be recorded so as to obtain a matching rate therebetween, and of determining whether said matching rate exceeds a predetermined level;

a third program code unit for recording the input speech as the learning data when it is determined in said determination step that said matching rate exceeds the predetermined level;

a fourth program code unit for performing learning on a speech model by using the input speech recorded in said recording step; and

a fifth program code unit for recognizing unknown input speech by using the speech model learned in said learning step.